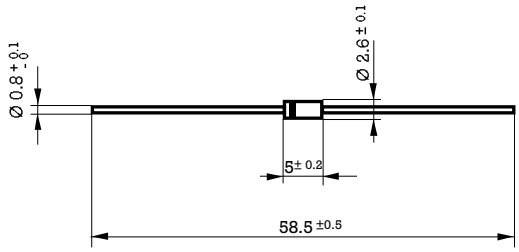
查询BZY97C10供应商



# 1.5 W Zener Diodes

Dimensions in mm. DO-41 (Plastic)




**Mounting instructions**

1. Min. distance from body to soldering point, 4 mm.
2. Max. solder temperature, 350 °C.
3. Max. soldering time, 3.5 sec.
4. Do not bend lead at a point closer than 2 mm. to the body.

**Voltage**
10 to 200 V

**Power**
1.5 W

- Diffused junction
- The plastic material carries U/L recognition 94 V-0
- Terminals: Axial Leads
- Polarity: Color band denotes cathode

## Maximum Ratings, according to IEC publication No. 134

| | | |
|---|---|---|
| $P_{tot}$ | Power dissipation at Tamb = 60 °C | 1.5 W |
| $P_{ZSM}$ | Non repetitive peak zener dissipation (t = 10 ms.) | 40 W |
| $T_j$ | Operating temperature range | – 55 to + 175 °C |
| $T_{stg}$ | Storage temperature range | – 55 to + 175 °C |

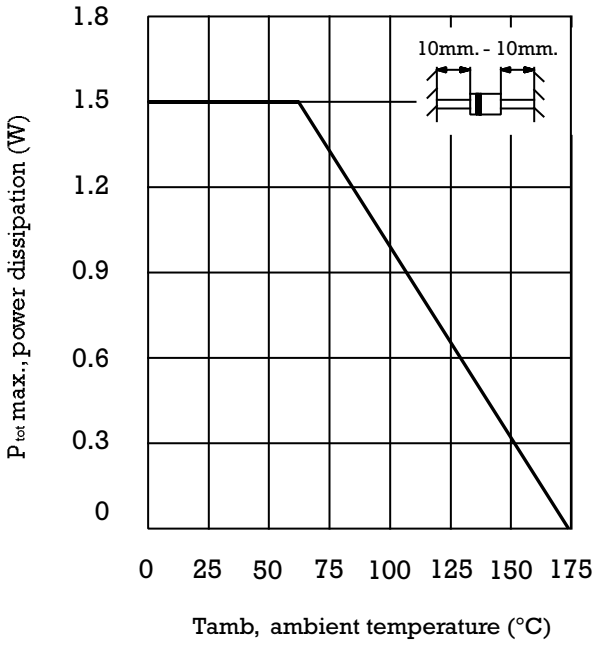
## Electrical Characteristics at Tamb = 25°C

| | | |
|---|---|---|
| $V_F$ | Max. forward voltage drop at $I_F$ = 1.0 A | 1.1 V |
| $R_{thj\text{-}a}$ | Max. thermal resistance at 10 mm. lead length | 50° C/W |

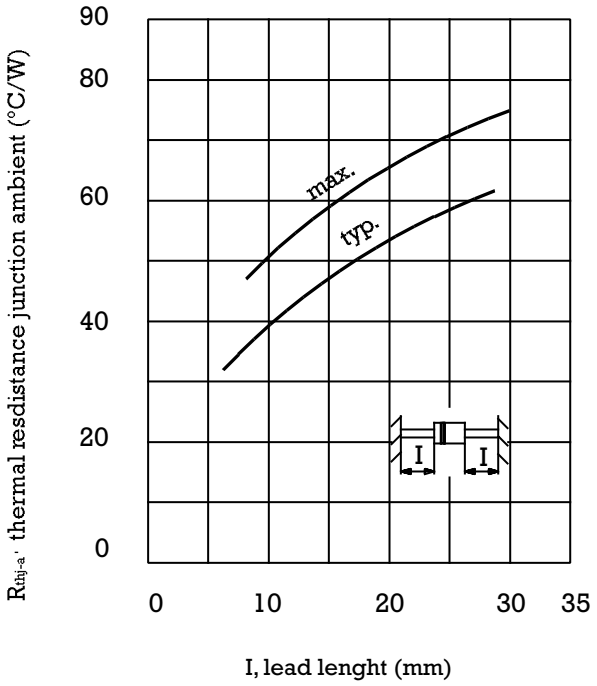
| Type | Zener Voltage Range $V_Z$ at $I_{ZT}$ | Maximum Zener Impedance $Z_{ZT}$ at $I_{ZT}$ | Typical Temperature Coefficient at $I_{ZT}$ | Test Current $I_{ZT}$ | Min. Reverse Voltage at $I_R$ = 1µA $V_R$ |
|---|---|---|---|---|---|
| | (V) | (Ω) | (% / °C) | (mA) | (V) |
| **BZY97C10 GP** | 9.4 - 10.6 | 4 | + 0.070 | 50 | 5.0 |
| **BZY97C11 GP** | 10.4 - 11.6 | 7 | + 0.075 | 50 | 5.0 |
| **BZY97C12 GP** | 11.4 - 12.7 | 7 | + 0.075 | 50 | 7.0 |
| **BZY97C13 GP** | 12.4 - 14.1 | 10 | + 0.075 | 50 | 7.0 |
| **BZY97C15 GP** | 13.8 - 15.8 | 10 | + 0.075 | 50 | 10 |
| **BZY97C16 GP** | 15.3 - 17.1 | 15 | + 0.085 | 25 | 10 |
| **BZY97C18 GP** | 16.8 - 19.1 | 15 | + 0.085 | 25 | 10 |
| **BZY97C20 GP** | 18.8 - 21.2 | 15 | + 0.085 | 25 | 10 |
| **BZY97C22 GP** | 20.8 - 23.3 | 15 | + 0.085 | 25 | 12 |
| **BZY97C24 GP** | 22.8 - 25.6 | 15 | + 0.085 | 25 | 12 |
| **BZY97C27 GP** | 25.1 - 28.9 | 15 | + 0.085 | 25 | 14 |
| **BZY97C30 GP** | 28 - 32 | 15 | + 0.085 | 25 | 14 |
| **BZY97C33 GP** | 31 - 35 | 15 | + 0.085 | 25 | 17 |
| **BZY97C36 GP** | 34 - 38 | 40 | + 0.085 | 10 | 17 |
| **BZY97C39 GP** | 37 - 41 | 40 | + 0.085 | 10 | 20 |
| **BZY97C43 GP** | 40 - 46 | 45 | + 0.095 | 10 | 20 |
| **BZY97C47 GP** | 44 - 50 | 45 | + 0.095 | 10 | 24 |
| **BZY97C51 GP** | 48 - 54 | 60 | + 0.095 | 10 | 24 |
| **BZY97C56 GP** | 52 - 60 | 60 | + 0.095 | 10 | 28 |
| **BZY97C62 GP** | 58 - 66 | 80 | + 0.105 | 10 | 28 |
| **BZY97C68 GP** | 64 - 72 | 80 | + 0.105 | 10 | 34 |
| **BZY97C75 GP** | 70 - 79 | 100 | + 0.105 | 10 | 34 |
| **BZY97C82 GP** | 77 - 88 | 100 | + 0.105 | 10 | 41 |
| **BZY97C91 GP** | 85 - 96 | 200 | + 0.11 | 5 | 41 |
| **BZY97C100 GP** | 94 - 106 | 200 | + 0.11 | 5 | 50 |
| **BZY97C110 GP** | 104 - 116 | 250 | + 0.11 | 5 | 50 |
| **BZY97C120 GP** | 114 - 127 | 250 | + 0.11 | 5 | 60 |
| **BZY97C130 GP** | 124 - 141 | 300 | + 0.11 | 5 | 60 |
| **BZY97C150 GP** | 138 - 156 | 300 | + 0.11 | 5 | 75 |
| **BZY97C160 GP** | 153 - 171 | 350 | + 0.11 | 5 | 75 |
| **BZY97C180 GP** | 168 - 191 | 350 | + 0.11 | 5 | 90 |
| **BZY97C200 GP** | 188 - 212 | 350 | + 0.11 | 5 | 90 |

## Characteristic Curves

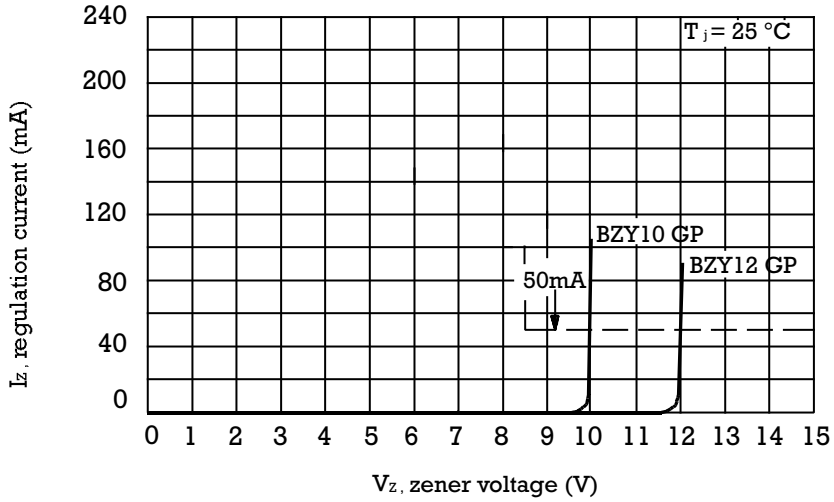
MAXIMUM CONTINUOUS
POWER DISSIPATION

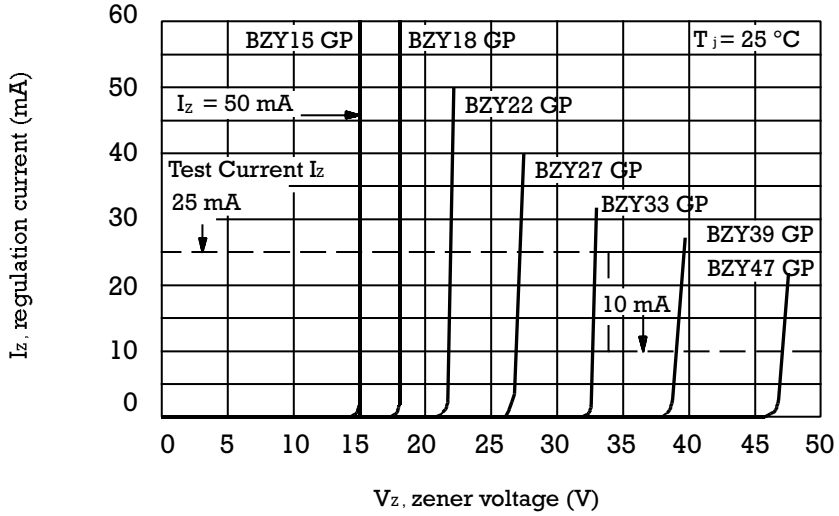


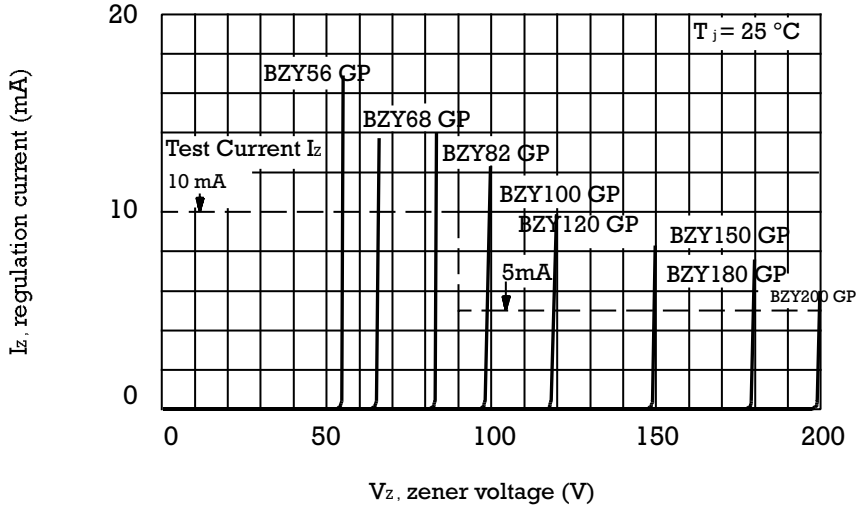

THERMAL RESISTANCE

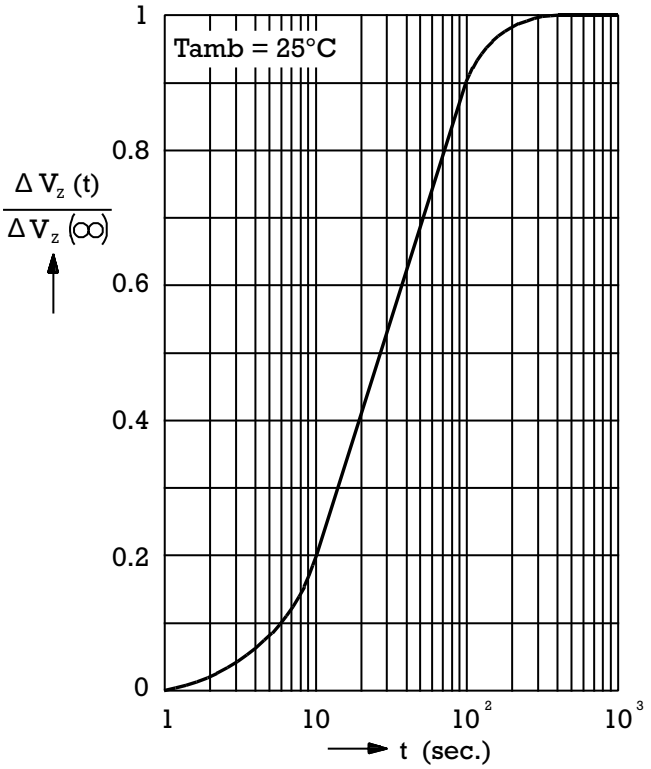


## BREAKDOWN CHARACTERISTICS

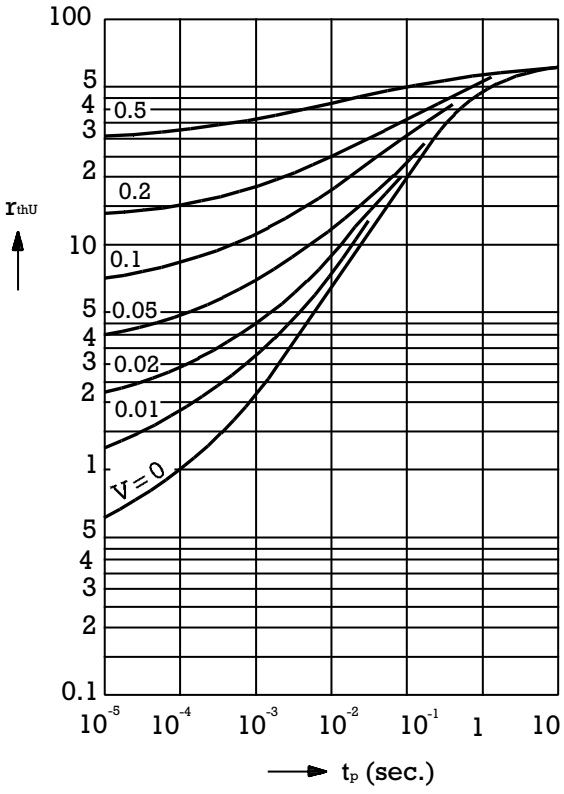





Relative change of Zener voltage versus turn-on time.




Pulse thermal resistance versus pulse duration. Valid provided that leads are kept at ambient temperature at a distance of 10mm. from case.